

Abstract of the Disclosure

A method and apparatus negotiates a maximum frame size to be used over a frame relay network. A local maximum frame size is identified by a first endpoint device of a 5 frame relay network so that other frames sent and received using that size will not cause other frames sent by the network device to be sent a period of time exceeding an acceptable delay after the other frames are received. The acceptable delay is the lowest acceptable delay among 10 originators and recipients of frames that use the endpoint device. The frame size identified is transmitted to other endpoint devices that can communicate with the first endpoint device. These other endpoint devices identify acceptable delays that correspond to the originators and 15 recipients of such endpoint devices. The other endpoint devices transmit their acceptable delays to the first endpoint device. If the first endpoint device has a payload of information to send to any of the other endpoint devices, the first endpoint device sends the payload using frame 20 sizes not larger than either of the frame size identified by the first endpoint device and the frame size received from the endpoint device to which the frame will be transmitted.